

III SITE ANALYSIS

Context and Site Description

Regional Context

The town of Westford is located approximately 10 miles south of New Hampshire and 30 miles north-west of Boston. The town is bordered on the west by Littleton and Groton, on the north by Tyngsborough, on the east by Chelmsford, and on the south by Acton and Carlisle.

Local Context

The site is located on the western edge of Westford, on the northern banks of Forge Pond, a portion of which is also located in Littleton. This area has been identified as Forge Village, an industrial and residential village, one of several villages within the Town of Westford.

Historic District

The site lies within the Forge Village Historic District, which was listed on the National Register of Historic Places in May of 2002. (See Appendix D for an excerpt from Westford's Preservation Plan.)

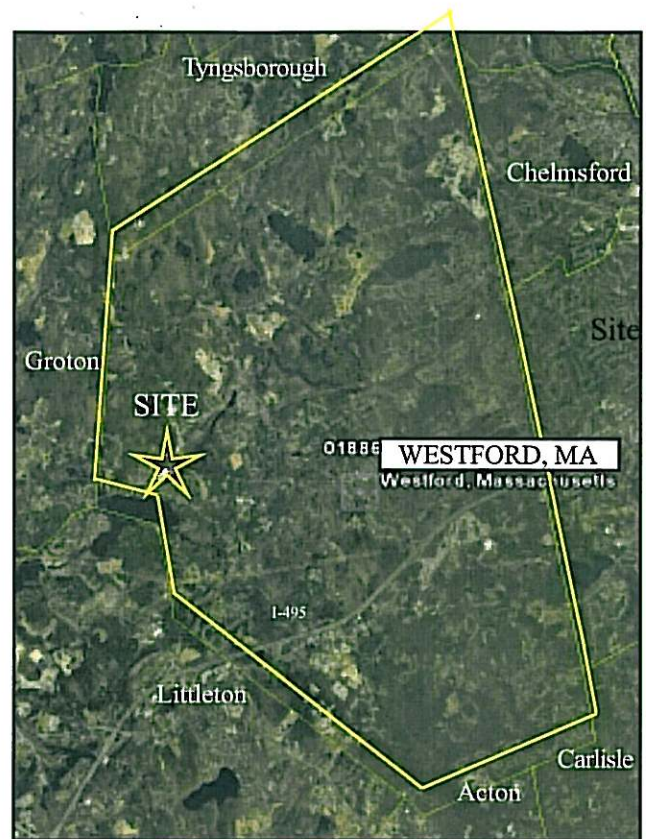


Figure 3.1 Aerial showing Westford's town borders (Google Earth 2006)

Figure 3.3 Inset Below: Bird's eye view showing portion of Forge Village and Senior Center Site.

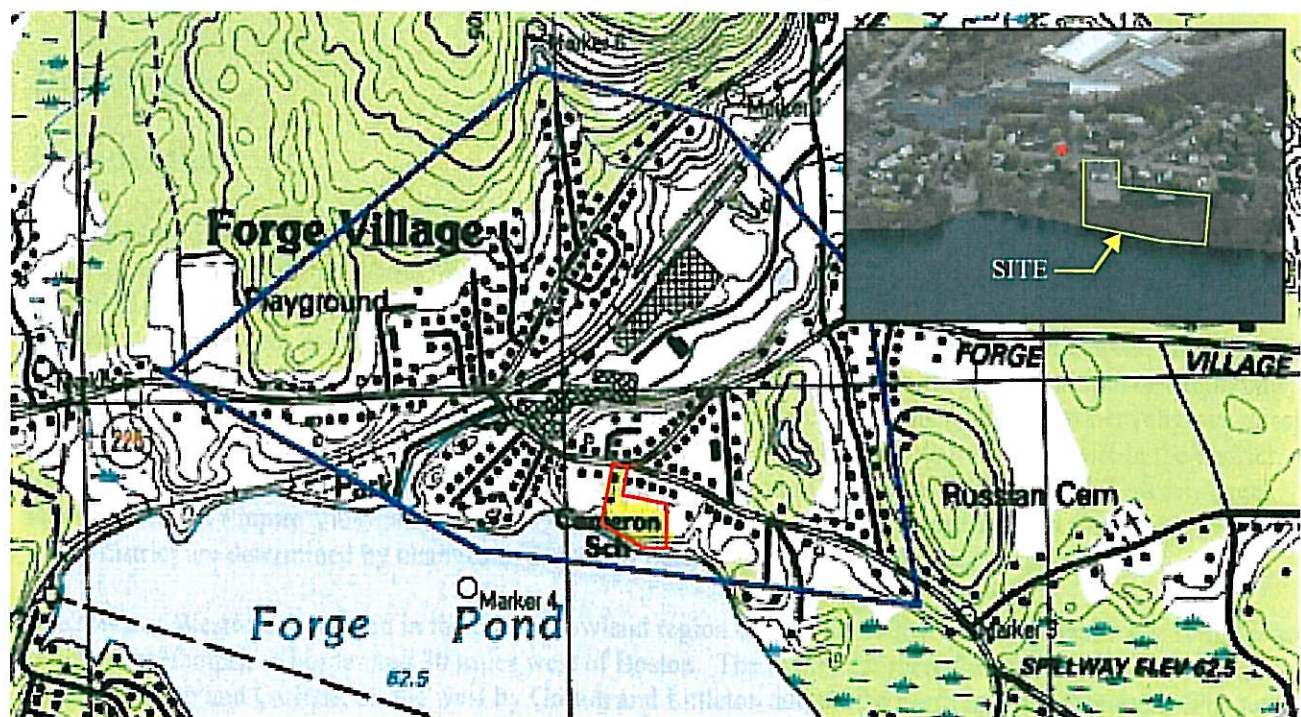


Figure 3.2 Delineation of Forge Village Historic District

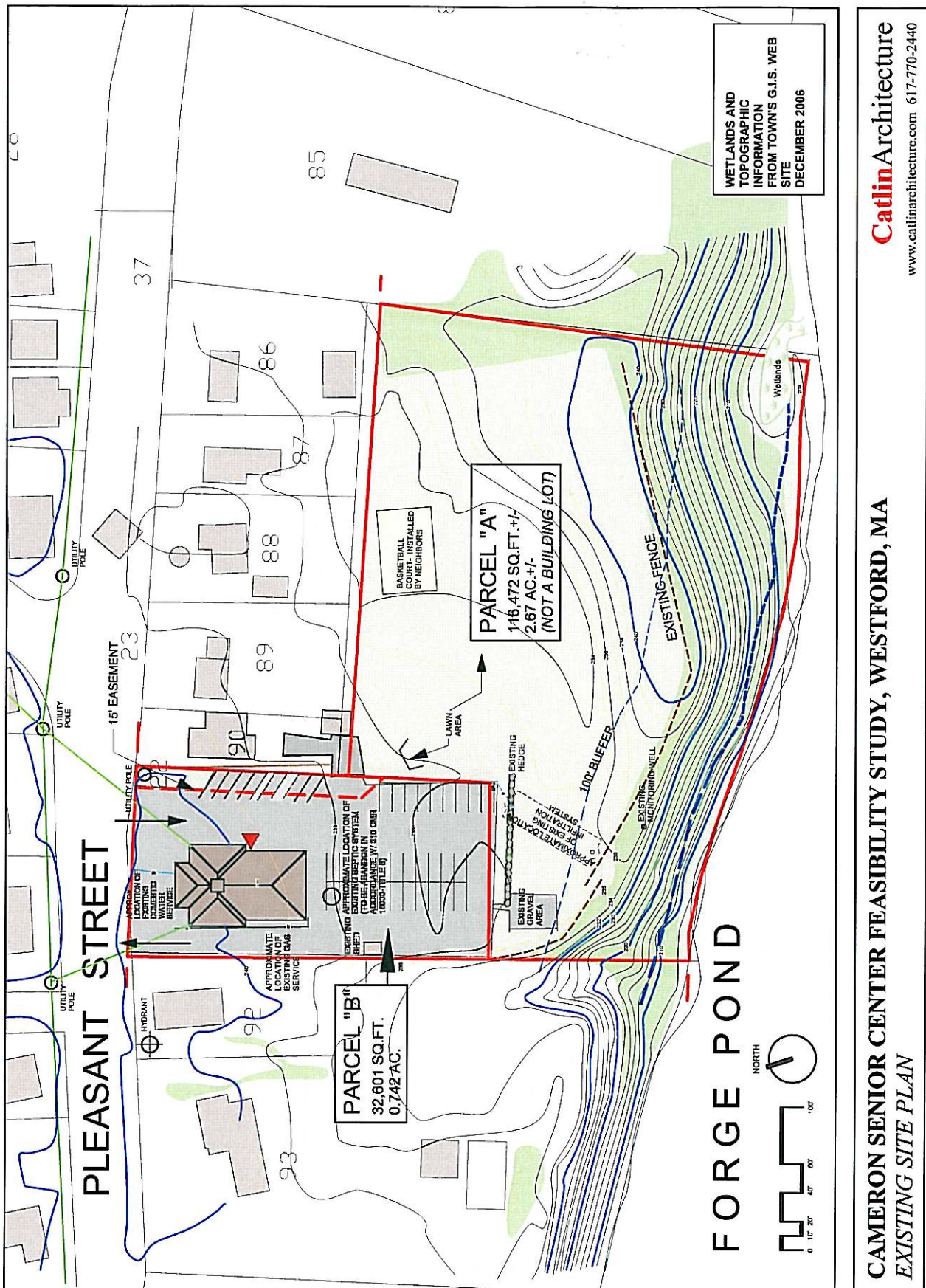


Figure 3.4 Existing Site Plan

General Description

Two separate parcels comprise the site: the Cameron School parcel that fronts Pleasant Street and the rear parcel that abuts the pond and was conservation land. Virtually the entire first parcel has been paved while the other parcel is largely lawn area with a basketball court and is wooded along the southern and eastern edges. According to the PTBC (Permanent Town Building Committee) the second parcel is not considered a building lot, although parking and outdoor recreation would be permitted.

The building is sited 30 feet from Pleasant Street, and 22 and 54 feet from the western and eastern lot edges, respectively. Angled parking (7 spaces) is located along the eastern edge of the site, and is separated from the accessible building entrance by the access drive. The remaining parking (+/-34 spaces) is located behind the building. The exit drive follows the western lot line.



Figure 3.5 Main building entrance (east side) adjacent to access drive and angled parking.

A fifteen foot wide easement follows the eastern edge of the site contiguous with the abutter. This easement is to provide access to the abutter's driveway, which is accessed from the rear. Currently, the actual 15' easement is used for parking. Access for the abutter is provided on the adjacent drive.

Wetlands and topographic information is from the Town's GIS website.

Topography

The primary land parcel (Parcel "B") on which the current building sits is largely flat, sloping gently down from north to south – about 5 feet over a distance of 200 feet - with about a 2.5 – 3 % slope. The additional parcel, "Parcel A" continues that slope, but rises up to a swale of about 6 feet to form a basin before the entire southern edge of the property drops down a steep bank to the water's edge. From the swale there is about a 30 foot drop in elevation while the drop at the bank south of the existing parking is about 25 feet to the water's edge.



Figure 3.6 Parking field at south side of building. Note exit drive on west (left) side of building.



Figure 3.7 View from southeastern edge of lawn looking west and north.

The slope of the bank ranges from about 28% to 66 % at its steepest.

Hydrology/Soils

The site has a perimeter of about 430 feet along the edge of Forge Pond.

Hydrology

There is a small area of wetlands, approximately +/-1,300 square feet, located at the southeastern corner of the site on the edge of the pond. There are no certified vernal pools on site (per Westford Vernal Pool 2006 map).

Soils

It is recommended that soils testing be conducted, including borings for structural considerations and percolation tests for septic and drainage purposes.

Site Utilities

Sewer

There is no Town sewer in Westford. The existing septic system in the building is in need of upgrading. A septic design for a conceptual building expansion has been completed for a 300-person occupancy. See Appendix B for drawing. The design and location of the system will need to be reviewed at the time of final design.

Water

Town water is available in Pleasant Street. The connection to the building is located on the north elevation east of the building center line. A sec-

ond line must be brought in for a new fire protection system.

The closest fire hydrant is located approximately 60 feet off the lot on Pleasant Street. A water flow test will be needed to verify available pressure.

Gas

Gas is available in Pleasant Street, supplied by KEYSPAN (www.keyspanenergy.com, 1-800-548-8000). The gas line runs parallel to the western side of the building and enters the building at the southwest corner of the building.

Electrical

Overhead service runs along the north side of Pleasant Street and is fed to the northwest corner of the building.

Electrical service is provided by National Grid (www.nationalgridus.com, 1-800-322-3223).

Underground utilities from the road to the site are recommended.

Telephone / Telecommunications

Overhead service runs along the north side of Pleasant Street and is fed to the northeast corner of the building. Verizon and Comcast provide service in Westford.

Underground utilities from the road to the site are recommended.



Figure 3-8 View from southwestern edge of parcel, looking east.

The building has direct satellite service through a dish located on the south wall.

Zoning Analysis

Address: #20 Pleasant Street

Parcel "A"

Parcel "B"

Zoning District:

Residence B (RB)

Size¹:

Parcel "A" 116,472 sq. ft. (2.67 acres)

Parcel "B" 32,301 sq. ft. (0.742 acre)

Total 148,778 sq. ft. (3.4 acres)

¹Zoning Dimensional calculations have been based on the sum of the two parcels.

Overlay Districts

The site lies within the following overlay districts.

- Conservation Overlay District
The eastern parcel that fronts the water is conservation land.
Parking and outdoor recreation will be permitted on this land.

Site Plan Review (9.4)

(See Appendix F)

Site plan review by the Planning Board is required for the construction, exterior alteration or expansion of a nonresidential structure.

Special Permit Performance Standards for major commercial projects (9.3A)

See Appendix F)

Site Plan Review will be required if project is considered a "major commercial project" and has one or more of the following characteristics: 15,000 sq. ft. or more of gross floor area (this building will have more than 15,000 gross sq. ft.); more than 100 required parking spaces; generation of more than 250 vehicle trips per day; Considerations Include: Lighting; Noise, Landscaping and Screening; Stormwater Management; Site Development Standards; Pedestrian and Vehicular Access; Traffic Management; Community Character, Utilities, Security, Emergency Systems.

It is recommended that an informal presentation

be given to the Planning Board at the completion of the schematic design phase, prior to beginning design development drawings.

Dimensional Requirements (Appendix C of by-laws)

	Required	+/-Exist.
Min. Lot Area SF	20,000	148,773
Min. Frontage LF	100	134.14
Minimum Yards (Setbacks)		
Front (feet)	25	+/-30
Side (feet)	15	+/- 21
Rear (feet)	30	N/A
Max. Bldg. Height (feet)	35	
<i>(measured from the base of the structure to the highest point)</i>		
Max. Bldg. Height (stories) ³	2-1/2	
Max. Bldg. Area (% of lot area)	N/A	
Min. Open Space	N/A	—
<i>(% of lot area in the zoning district)</i>		
Min. distance btwn. bldgs on same lot	20 ⁴	—

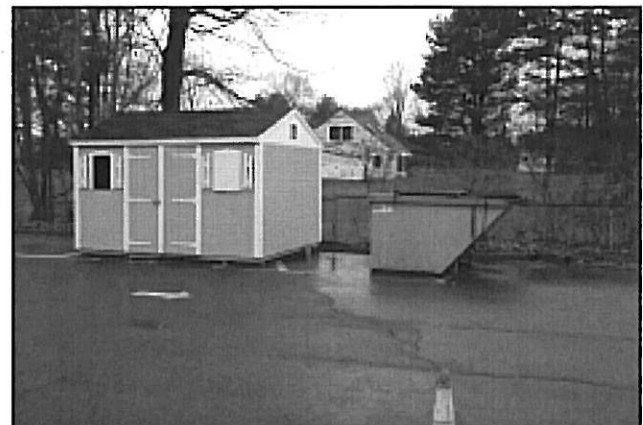


Figure 3-9 Shed and dumpster along western lot line.

² No parking lot in first one hundred feet from public way; all parking lots to be screened from a public way by either natural or vegetation or a landscaped berm, such vegetation or berm to be at least six (six) feet in height.

³ 3 stories if building sets back from each street and lot line ten (10) feet in addition to the requirements of this table.

⁴ One Structure per Lot. Except as otherwise provided herein, not more than one principal structure may be placed on any lot.(4.1.2)

Principal Use Regulations in RB (App. A)Permitted Uses

Municipal Facility, excluding parking lots
(parking associated with municipal facility is acceptable).

RB- Special Permit by Planning Board

Adult day care, large

RB - Not permitted

Municipal parking lot or garage

ParkingNumber of spacesMunicipal Facility

As may be determined by the Planning Board during site plan review

Place of amusement or assembly:

1 space per 200 square feet of gross floor area

Parking Standards

Parking Space Size: 9' wide* x 18' long

**Note: Architect recommends providing 9'-6" wide spaces for the elder population.*

Compact spaces: N/A

HC Parking: references 521 CMR

521 CMR Architectural Access Board

Size: 8' space / 5' striped aisle, an aisle may be shared between two accessible spaces or 12' wide space

Number of HC spaces

Total Pkg Spaces	Required HC Spaces**
26 – 50	2
Town Req. 41-100	3
76 – 100	4
101 - 150	5
151 - 200	6
201 – 300	7
301 – 400	8

*** Note: Architect recommends providing more HC spaces than required due to the larger percentage of mobility impaired persons in the senior population.*

Van accessible spaces

8' wide plus 8' aisle access

Location of parking: may not be located nearer than 15 feet from any lot line. *(Existing parking is located within 15 feet of eastern lot line.)*

All required parking spaces shall be surfaced with bituminous or cement concrete material.

(Note: A permeable surface may be desirable for this project. Relief from this requirement should be sought.)

Lighting- 1 footcandle min., shielded so as not to shine directly onto a public or private way or onto any property in a residential district.

Off-Street Loading requirements

Retail Stores and Services: 1 space for first 8,000 net sq. ft. plus one additional space for every additional 8,000 net sq. ft or fraction thereof.

Office Bldg: 1 space for each building greater than 4,000 net sq. ft.

Reductions from requirements by special permit of planning board.

Min. Size: 12' wide, 65' long, 14' high

Landscaping in Parking Areas

The parking areas shall be effectively screened on each side which adjoins or faces the side or rear lot line...consisting of a solid fence or wall not less than 2 feet nor more than 6 feet in height at the time of occupancy of such lot.

Curbed planting strips uniformly 25 feet in width shall be provided at the front line except for entrances and exits. *(Westford Zoning Bylaw Chapter 173, Section 5.1.7)*

Landscaping of planting strips shall consist of 1 shade tree at least 10 feet in height and at least 2" in diameter at a point 6" above finished grade. There shall be at least 1 tree for each one hundred square feet of required landscaped area. *(Westford Zoning Bylaw Chapter 173, Section 5.1.7)*

9.3A.4 – 3-C: Parking areas over 20 spaces shall have at least one shade tree per 10 parking spaces, such tree to be a min. of 2 ½” in diameter and located wither in the parking are or within 10 feet of it. At least 5% of the interior of the parking area shall be maintained with landscaping, including trees, in landscape islands or plot.

Signs in RB (5.3.8)

1 wall sign or freestanding pole or ground sign which does not exceed 2 sq. ft. in area, having the name of the occupant or designation of any authorized occupant.

Exemptions: any sign erected or required by the Town or Commonwealth.

Planning Board may authorize larger signs or greater number by special permit, where such relief is not detrimental to the neighborhood or the town.

Westford Zoning Definitions

Basement - a portion of a building, partly below grade, which has more than one-half of its height, measure from finished floor to finished ceiling, above the average finish grade of the ground adjoining the building. A “basement” is not considered a story unless its ceiling is four feet or more above the finished grade.

Building Area – the aggregate of the maximum horizontal cross-section areas of all buildings on a lot, exclusive of cornices, eaves, gutters, chimneys, unenclosed porches, bay windows, balconies and terraces, expressed as a percentage of total lot area.

Building Height – the vertical distance from the adjacent ground to the top of the structure of the highest roof beams of a flat roof, the deck of a mansard roof or the mean level of the highest gable or slope of a hip roof.

Community Facility – a building and lot used and operated by a public or other nonprofit organization.

Adult Day Care, Large – facility, whether accessory or principal, for the social day care or adult day care of more than six persons over the age of 16.